# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	)	Group Art Unit:	3473
KIEFHABER, et al.	)	TC/A.U.	2609
Serial No.: 10/815,534	)	Examiner:	NGUYEN, K.
Filed: March 31, 2004	)		N OF HENRY R. PADDOCK CR 37 C.F.R. §1.131
Atty. File No.: 4366-140	)		
For: "CONTACT CENTER AND METHOD FOR TRACKING AND ACTING ON ONE AND DONE CUSTOMER CONTACTS" (Amended)	)		

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Dear Sir:

# I, Henry R. Paddock, declare as follows:

- I am currently employed by Avaya, Inc., which has an interest in the above application, and an inventor of the above-referenced application. I receive an inventor award in connection with the above application. This Declaration is being submitted in connection with prosecution activities for the above-referenced patent application.
- An interview regarding the subject matter of the above-referenced application was held among Rodney Thompson and myself on the one hand and David Volejnicek, corporate counsel, in March, 2003.
- 3. Patent Submission 403037, attached hereto as Exhibit "A" and entitled "Tracking and Acting on One and Done" was prepared and thereafter received for consideration by the Intellectual Property Law department of Avaya. The IP Law department approved the submission for filing as a US patent application and forwarded the Patent Submission to outside counsel.
- 4. Upon information and belief, the Patent Submission was forwarded to outside counsel on June 24, 2003, and received by outside counsel on June 26, 2003. On June 30, 2003, Douglas Swartz, the outside counsel, contacted myself and the other inventors regarding scheduling an in-person interview to discuss the Patent Submission. Emails were exchanged among the various parties on June 30 and July 1,

3, and 8, 2003, attempting to scheduling the interview. Rodney Thompson was out of the office until July 10, 2003.

- 5. The interview was held in Westminster, Colorado, on or about July 8, 2003. An annotated partial transcript of this interview is attached hereto as Exhibit "B". Also attached to Exhibit "B" are drawings generated during the meeting. At the meeting, we discussed three separate inventions, each of which was to be the subject of a separate patent application.
- 6. A draft patent application was forwarded to us for review on or about January 5, 2004.
  Mr. Swartz sent a reminder to us to review the application on February 11, 2004. Two other draft applications directed to the other inventions were forwarded to us around the same time.
- Upon information and belief, we reviewed the application in mid-February and provided our comments to Mr. Swartz by email on or about February 24, 2004.
- Mr. Swartz revised the draft application and forwarded it to us for further review on March 8. 2004.
- Mr. Swartz subsequently sent an email to us on March 15, 2004, requesting our further review of the application as the application needed to be filed by the end of March.
- 10. Katherine Sobus send an email to Mr. Swartz on March 16, 2004, requesting a copy of any document that needed to be signed before her departure on a trip to South America the following week. She was to return from the trip on March 29, 2004.
- Emails were exchanged between outside counsel and Ms. Sobus on March 25, 2004, regarding execution of documents.
  - A final draft of the application was forwarded to us on March 25, 2004.
- After reviewing the draft application, I and the other inventors signed the Declaration and
   Power of Attorney and Assignment and returned them to Mr. Swartz.
  - The above-referenced application was subsequently filed on March 31, 2004.
- 15. With reference to independent claims 1, 13, and 27, Exhibits "A" and "B" collectively describe identifying contacts that are not "one and done" and taking appropriate actions for these contacts, such as sending the contacts to an appropriate destination or recording the contact interaction. A non"one and done" situation can be derived based on the duration between current and last contacts from a common customer, the contact center customer entering an existing trouble ticket id or specifying that the most recent contact is in regards to a previous contact, a contact center agent entering information that relates the current contact to one or more previous contacts, receiving an email from a contact center customer that contains the existing trouble ticket number, content analysis, post-contact survey results from previous contact, etc. Once a contact is determined not to be a "one and done" situation, the contact

center can take action to minimize the number of contacts (x and done), such as route to a better skilled agent or supervisor, activate quality monitoring (contact recording), start service observing, alert a business manager or executive, and the like.

- 16. With reference to independent claim 1, Exhibit "B" describes tracking, over a selected time period and for a set of agents servicing discrete real-time and non-real-time contacts, a number of discrete real-time and non-real-time contacts serviced by the set of agents that are and/or are not related to one or more other discrete real-time and non-real-time contacts serviced by the plurality of agents. Exhibit "B" further describes maintaining, for the set of agents, an indicator indicating at least one of (i) a number of discrete real-time and non-real-time contacts, serviced by the set of agents during the selected time period, that are not related to one or more other discrete real-time and non-real-time contacts, serviced by the set of agents during the selected time period, that are related to one or more other discrete real-time and non-real-time contacts, serviced by the set of agents during the selected time period, that are related to one or more other discrete real-time and non-real-time contacts serviced by the plurality of agents.
- 17. With reference to independent claim 13, Exhibit "B" describes receiving a first real-time contact from or initiating a second real-time contact with a first customer, determining whether the first and/or second contact is related to another real-time or non-real-time contact with the first customer, and, when the first and/or second contact is related to another real-time or non-real-time contact with the first customer, servicing the first and/or second contact differently than when the first and/or second contact is unrelated to another real-time or non-real-time contact with the first customer.
- 18. With reference to independent claim 27, Exhibit "B" describes a contact center for servicing contacts having an input operable to receive a contact from a first customer and a selector operable (i) to determine whether the received real-time contact is related to another real-time or non-real-time contact with the first customer and (ii) when the received real-time contact is related to at least one real-time and non-real-time contact with the first customer, to service the received real-time contact differently than when the received real-time contact is unrelated to at least one real-time and non-real-time contact with the first customer.
- 19. The foregoing statements and attached exhibits establish a conception date before the July 22, 2003, filing date of U.S. Patent Application Publication 2005/0021529 to Hodson, et al., and the August 20, 2003, filing date of U.S. Patent Application Publication 2005/0043986 to McConnell,

et al., and diligence between the conception date and the constructive reduction-to-practice date, or the filing date of the above-captioned application.

20. Thereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that the statements were made with the knowledge that willful false statements and the like, so made, are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the subject application or any patent issuing thereon.

11/2/07	11/2/07	5	Shin	1	Paddie 1	•
Date:	Ву:	Henry R. Paddoo				

# **EXHIBIT A**





subject:

Patent Submission – Tracking and Acting on One and Done

date: March 20, 2003

 $\mathcal{I}$ 

from: Sara

Sarah Kiefhaber CRM Systems Engineering DR D3-B56 +1-303-538-4859 kiefhaber@avaya.com

Joylee Kohler CRM Systems Engineering DR D2-G61 +1-303-538-1379 joylee@avaya.com

Henry (Randy) Paddock CRM Development DR D3-C45 +1-303-538-4337 hpaddock@avaya.com

Katherine (Kathy) Sobus CRM Sales Support 1006 Weldin Circle Wilmington, DE 198030000 +1-302-762-3345 ksobus@avaya.com

Rod Thomson (editor) CRM Systems Engineering DR D2-F56 +1-303-538-4139 rathomson@avaya.com

PLEASE TRY TO LIMIT YOUR SUBMISSION TO 2 PAGES (MAXIMUM - 3).

IF YOU HAVE ANY QUESTIONS REGARDING THIS SUBMISSION FORM, PLEASE CONTACT DAVID VOLEJNICEK, +01-303-538-4154 or TINA WILSON, +01-303-538-4600.

TO: Avaya West Patent Committee - Room 2U41, 1300 W 120th Avenue, Denver, CO 80234-2701, trwilson@avaya.com

Problem:

What overall problem(s) does the idea solve?

For many contact centers, a key measure should be "one and done." Whether the center is sales or services, when a customer contacts the center multiple times to accomplish one transaction, the cost of service rises, which lowers the overall profitability. The problem is that it is not easy to compute "one and done" and therefore agents and contact

AVAY INC. PROPRIETARY

Use pursuant to Company Instructions.

centers today are not measured against it. Another consideration of one and done is whether the contact had to be served by multiple servers (e.g., agents) - even in a single interaction.

#### Prior Art:

How have others -- either within Avaya or outside -- addressed the problem, if you know? What is the present commercial practice? In what way(s) do the presently known solutions fall short of fully solving the problem(s)?

Existing art allows for the tracking of "trouble" tickets (e.g., WebQ/QQ business application). These trouble ticket applications can retrieve open and closed trouble tickets and display them to agents. It may even be possible, through integration, to push the most recent trouble tickets to an agent upon delivering a contact. We are not aware, however, of existing art that allows for the identification of a situation that is not "one and done," and then make contact-handling decisions based unon this identification.

## Brief Description:

What is your solution to the problem(s)? Supply block diagrams, sketches, high-level flowcharts, etc., as attachments, along with a written description which explains how the invention works and how it relates to its environment.

This proposed concept enables a contact center to identify contacts that are not "one and done" (either through automatic or manual methods) and for a contact center to take appropriate action for these contacts, such as sending these contacts to an appropriate destination or recording the contact interaction. A non-"one and done" situation can be derived based on duration between current and last contact (defined by the confact center), contact center customer entering an existing trouble ticket fd or specifying that the most recent contact is in regards to a previous contact, contact center agent entering information that relates the current contact to one or more previous contacts, receiving email from a contact center customer that contains the existing trouble ticket number, content analysis, post-contact survey results from previous contact, sice. Once a contact is determined not to be a "one and dope" situation then the contact center takes action to minimize the number of contacts (x and done), such as route to a better skilled agent or specified in the contact center takes action to minimize the number of contacts (x and done), such as route to a better skilled agent or specified in the contact center takes action to minimize the number of contacts.

### Comparison:

What are the basic differences between your solution and those known in the prior an? What commercial benefits or advantages arise from those differences (such as reduced product cost, new or enhanced product feature, greater reliability of operation)?

The new art takes action, such as escalation, on contacts that are identified to have previously related contacts (not "one and done"). The action should be intended to minimize the number of contacts required to address a customer request/ssuc.

#### Novelty:

State in one sentence the gist of what distinguishes your idea from the prior art.

This idea enables a contact center to measure itself against its "one and done" objective and to take appropriate action, on a contact level, when the goal is not met.

# Use of the Idea:

Standards: Is the idea of a type which gets incorporated into industry standards? Are there present plans to include the idea in an Avaya submission to a standards body?

Avaya use: What existing or planned Avaya products incorporate the idea? If none, what is your opinion as to the likelihood of Avaya use and the time frame? What is the busis for your opinions?

Others' use: Answer same questions vis-à-vis other companies.

Standard: Not Applicable

Avaya Use: This solution can be accomplished through the integration of Interaction Center, Operational Analyst, Avaya and/or 3<sup>rd</sup> party applications (e.g., Siebel), etc., and make handling decisions (e.g., identify destination, activate contact recording, service observing, etc.) based on the identification of a situation that is not a "one and done" situation. Interaction Center records contacts that were not "one and done" for Operational Analyst reporting purposes. This

AVAYA INC. - PROPRIETARY
Use pursuant to Company Instructions.

enables the contact center to monitor the success of the "one and done" objective. Avaya IR, for example, can be scripted to collect information that identifies situations that are not "one and done," which allows IC to take the appropriate action.

Others' Use: Like Avaya, other companies can define their work flows, or routing engines, to identify situations that are not "one and done" and to take the appropriate action when this situation is encountered. The best means of detecting these situations is likely to require the integration of routing decisions and 3<sup>rd</sup> party applications (e.g., Siebel trouble ticket application). IVR systems, etc.

#### Detection of Use:

How would others' use of the invention be detected by Avaya? For example, would it be visible from the product or service offering itself? Described in a product brochure or user/repair manual?

If none of the above, would reverse-engineering to discover use be complex/expensive? straightforward/inexpensive?

The use of this invention should be fairly easy to detect. The feature may be advertised in marketing collateral. The ability to support this functionality may appear in white papers. The contact center itself would have to establish a mechanism to collect the data to be able to identify situations that are not "one and done." These mechanisms would likely be apparent to contact center customers (e.g., TNR request for related trouble ticket number, etc.). The contact enter would then have to treat the contact appropriately based on this knowledge. The action may be more difficult to detect since it may not be noticeable to the contact center customer (e.g., delivery to a supervisor, activation of contact recording, activation of service observing, etc.).

## Economic Impact:

What is the annual sales volume or revenue across the industry for products/services that this idea applies to?

"One and done" is a desirable objective for many contact centers. The affected industry is the multi-media contact center industry. The addressable Multi-Media Contact Center market is estimated to be \$1.6 billion in 2003.

### Originators:

List name, business group and organization/team name or acronym, department, room number, extension, email.

 Sarah Kiefhaber
 Henry (Randy) Paddock
 Rod Thomson

 CRM Systems Engineering
 CRM Development
 CRM Systems Engineering

 DR D3-E56
 DR D3-C55
 DR D2-F56

 +1-303-538-4859
 +1-303-538-4337
 +1-303-538-4139

 kiefhaber@avaya.com
 hpaddock@avaya.com
 rathomson@avaya.com

joylee@avaya.com

ksobus@avaya.com

\_ .

Your Director's Name? Susan Murtishaw

### Attorney:

List any attorney with whom the idea has already been discussed.

David Voleinicek

## Attachments:

AVAYA INC. - PROPRIETARY
Use pursuant to Company Instructions.

Identify them.

None

Randy Peddoch Rodney Thompson

"One & done"

how does contact it's ensure that / contact

when you dised something to not "considere" what can you do yo notify call ell's thereof

how would you like the not one older"

midding tidet #

analysis of what calles suits /4/0 IVR

\* looking a word agent is pulling upon

screw

\* also the in multiwed a confacts,

eg. by 'subject Wind

outs you ID notorerded, confect differently to excure resolution

also sejort juston idea- no development not cevare of any P.A. One and done

Problem: For many contact centers a key measure should be "one and done". Whether the center is sales or services, when a customer contacts the center for a previous interaction, the costs go up which lowers the overall profitability. The problem it is not easy to compute "one and done" and therefore agents and centers today are not measured against it. Another consideration of one and done is whether the contact had to be served by multiple servers even in a single interaction.

Identifying: Ways to determine one and done: agent indication, customer indication, content analysis, re-contact within a certain time frame. In all cases I don't know when I finish a new interaction if that particular interaction will be one and done.

Reporting: One thought is rather than focus on whether today's contacts will be one and done, is to focus on how many of today's contacts were related to previous interactions or required multiple <a href="#ervers">ervers</a>. We would need to track this against the previous agent. For example, there were 12 interactions today that agent x had not closed on the contact's last interaction.

Acting: When I determine this is a subsequent related interaction, I can take a number of actions. I can turn on a recording or start a service observing, I can pick an agent who is better at closure, I can alert a manager.

# **EXHIBIT B**

лg

10

IN/

....

1

-2-

-3-

10

135,

INV:/ ..?.. Kathy....

Kay, hey, where are you? Okay... Do you want to listen in here? Yeah, no....

Thank you.

Okay, hang on a second. Yeah, we tried to call you earlier and it said you were out of the office all day, and so, I'm like, okay.

Yeah, I'm been trying to track the number down so....

I'm amazed you figured it out. There's a good piece of detective work here.

Yeah, how about that. Everybody's got messages from me though, I apologize to everyone.

..?.... when you get back to your desk.

I guess what we should have done was leave you a message giving the number and then you would have had an easier time.

Yes, that's the first thing I sent to his voice mail.

Sorry about that.

Anyway.....

So we're talking about the using agent trends.....

DWS: We're talking about.... Hi, Kathy, this is Doug. We were talking about the different types of things that are used in tracking the trends. I'm looking at the footnote here, you guys mentioned revenue generation rates based on time of day, day of week, etc., and revenue generation is simply sales would be in a sales context..

It could be sales, but it also could be services related where if your reducing costs,

DWS: Reducing costs...

profitabilit

... calling/revenues trends, it could be this possibility trends.

Yeah, that would be better. In a service situation, if there able to save money to the company by resolving issued worker... kind of ties into the one ..and done

Yeah, .....

DWS: And lets talk for a minute about profitability that would also be probably within the skill level or a call time, wouldn't it? Wouldn't you track that for instance, if I have different

-6-

Trend ing

types of products I'm selling, this person may be more proficient in selling product ..?. on certain days and less proficient on the days, but he's better at selling product B. So you could have this broken down by product or service being offered by the call center as well.

INV: Absolutely.

DWS: And you could even have it indexed by agent skill set which is call type and skill set, I'm not sure are the same.

Or you can get from a variety area, you can get it alsome medium level or still skill level, an agent level and you can also get it from a customer level, alsome point information out of customer database for that information.

DWS: Okay, when say at the agent level, your talking about relative to other agents?

INV: Well, the performance then would be at the agent level, looking at their performance as to

the but it for their skills, whatever would be at the agent level, but I would be tracking that.

Right, the trends would be tracked on agent level, I'm confused by the statement about customer.

There's a profitability close to applicants that are, as it relates to the customer calling in too, so for instance there use to be in the catalog business, so I would send out catalogs to a variety of different customers, some of which are more profitable that my business than others. And they would have a certain key code on the back of their catalog which would tell me how profitable they were to my business, as a group.

DWS: May be that's why I always get zeros on all my catalogs.

INV: I was going to say why? That's not so great.

Thoughton

So would that be, so your saying... I don't quite get that either. Is it saying that for the agent

that we're tracking, how this agent performs with this kind of customer.

Right, right, so I have group A, which work group by anything from anybody, because their just great customers, their just going to buy anyway. But would they buy more from certain groups of agents or certain agents than they were others. May be. And then I have line D customers that, like don't by squat. It's just a whim, it's like we get them to call in and buy something from me and my better paring them with a certain group of agents than another group of agents. Do they become more profitable with certain agents than others.

So it almost sounds like your taking about customer trends in that situation.

So, I sort of see that, because you know, it's sort of like, well we're talking about time of day for example...

Agent is better on these kind ... this time of day, well, agent does better with these kinds of customers rather than these kinds.

I mean you could look at it for instance like somebody who is high pressure verses low pressure in terms of sales, they might be able to convert some of those customers that units secured normally wouldn't buy or may be the customers who normally wouldn't buy or may be the customers who normally wouldn't buy ...?. so their

lack

really laid who's willing to say well, have you thought about this. So... I can kind of see that. So a real life example would be when I was actually listening to a telemarketing call that I had where the man was on the phone with this lady and she was telling him how she was making jam An and she was like reciting this jam recipe to him, but she was talking to him... I mean he was selling her and the people that were running the company were apologizing to me and I said don't apologize to me because he knows how to speak to her and she will buy from him, where she might not have bought from a high pressure salesperson.

Yeah, that would be really good to know, especially if your doing any kind of agent diverse performance evaluation... yeah, you don't want to bigg somebody because they handle those types of calls that make sales.

That particular agent only clipped two calls that hour, right, where other 10, but he converted there, and the others only converted 2 out of 10, right, you know, so he was a 100% for what he took, the others were only 20.

DWS: It almost sounds like we're... there's two things that are out on the table, one is patterns,

S
another one is may be measuring new metric.

That's a really good point because how good is this product or service of going to be if there's no way for me to measure and proof this value back to the customer, back to our customer, our Avaya customer. I have to be able to measure it.

DWS: Yeah, but what are the new metric that we haven't measured before that we're talking about here?

INV: Well we kind of start the run hand in hand with business analytics for me... to really begin

MINE

to pull apart and raided and model what my customer base looks like which many customers can do today, more of of our, more advanced customers arguing today. And then I've never been able to do this at an agent level and I've really never been able to pare them together in a meaningful way. So ability is business analytics for me.

DWS: Because may be we need to go after those two concepts patterns using just standard metric as well as new metric for pattern measurement and then trying to claim these new metric in and of themselves. But I need to have more clarification on what these new metric are and it sounds like there all agent focused.

Agent and customer focused for me. Do you think we could actually claim the metric.

DWS: Sure, if you can come up with new ones. But we have to have enough clarification as to what they are to distinguish all the art about skills and call types.

INV: I'm not sure it's new metric so much as making use of existing metric in new ways. Mostly in linking them, then being able to use them. I mean, I'm not sure...

DWS: So in new ways, you mean patterns?

INV: Well, I mean taking information that's in two different places and trying to pare it and then doing the pattern kind of analysis on it and making use of it in terms of scheduling decisions. Work scheduling.

DWS: So talk about the linking for a minute, because that really is the broadest way of looking at your invention.

Well, my....

Kathy, go ahead if you have something.

absolutely

Four pateur

DWS: Well, I mean anything can be patented if no ones done it for. But the question is, we have to be able to identify what we want to claim with sufficient specificity to go after it and I'm still concerned that, because we can always think of isolated examples, well... in this situation I would do this and this, but if you try to ......... situation independently, your going to have a zillion claims. There has to be a common thread and may be you guys should think about that.... may be flush that out when we work on the draft of the application. What I can do now is just focus on the pattern aspect, because that really is the heart of what you guys are going after I think. Collected operation data may include the average amount of time spent in the contact and what I just heard, you say Kathy, that it could also consider the percentage of successfully handled contacts. Even though the amount of time may be high, if the guy's a high percentage of successful completion on contacts, then that's a metric that can be used in determining patterns.

and done

I would agree with that. I think that would fall nicely into the one in ... as well.

And I think what she was saying there too, is your tracking it based on some metrics of the call, like what kind of customer this is for example. So then you can compare that, so okay, this person has a success rate of whatever, some percentage... but you want to type that in with the kind of calls there in... so what percentage of success rate did they have with this kind of call verses sort of the average, right. So if they do better at this kind of call then the other agents then ... we want to get that kind of call to them, you know, verses, well, they had a success rate that was higher on this other kind of call. But relative to the other agents they did worse, so in that case you wouldn't want to give us a call. So your right it is trying to measure it against some sort of metric you know you've got first the overall, I would think.

DWS: So you have .... and I think the key thing here is, there's also another factor that your waiting is part of that which is this dimensioned a determinated pattern, time of day, day of week. Also not only temporal but also just event based. So you kind of have two ways of looking at the pattern, one is this purely based on time, the other one is based on event or combination of time and event. A guy comes in first thing in the morning, gets a bad call, he's trashed the rest of the day ....

He's trashed the rest of the day, exactly.

DWS: So there's.... I think that pretty much is the metric that using to determine pattern, either event or time based. or a combination

I mean I guess the thesis is that people have rhythms and preferences in the way they work and if we could discern that and try to steer things to them, so they'll be successful, then things, I mean, lots of good things come out of that for the business.

-12-

I think your right, it's time and event... like what ...?... let's say three of these kinds of events in a row, based on that we can predict that your going to do this on the next thing, so we can make an intelligent decision.

DWS: And overlaying that is, the fact that your looking for patterns based upon call time, agent, customer. I mean all these metrics then that come in....

INV: Media type.

> Media type, so you could actually have a series of patterns for a given agent, you could have the time of day or event based overlaid with media, then have the same thing overlay with customer type, have the same.... so then you could consider all that matching and you could say, well, e-mail this customer type...this time of day, this guy's the hottest, then you assign to that queue for awhile and your moving these people around.

Their like your concepts abut reserve and backup agents, because they may not be peak performing during a certain period or after a certain sequence of events, but we want to keep them in that skill as a reserve or backup in case the call the contact center demands that they be activated despite the fact that that's not their peak time.

DWS: So the collected data may then be analyzed to determine any trends related to time of day, day of week or event. One agent has ... media type really isn't what you determine the pattern based on, it's one of the things that .... I think it's either time or event .... then you, with that in mind, then you would begin to look at other factors which would be media type, revenue, call type, customer ..... It's kind of like you have two tiers of factors, one, on the one hand, your either going to use in your ...?... an event based or time based variable. And then on the other axis of the plot or... I guess it could be multi-dimensional. You would have these other factors, the second group which would be....

And your looking for a correlation between those, you know, certain times, certain media or better worse, that sort of thing.

I would say, the way I would like at it, I think, ...?.. the thing about this is if you have an event, there's going to be attributes associated with the event and media would be an attribute, customer type would be an attribute.

DWS: That's true.

INV: That's the way I would look at it.

DWS: Yeah, and may be when the guy works on e-mail for 1 hour, he gets bored and his performance just drops to nothing. So then you pull him off e-mail and put on live contact, because some people just don't work well.

NV: Just saying... that's exactly what we thought when we were coming up with this idea was, you know, this person keeps getting that same... their doing really well, but they keep getting that same thing over and over and over time, their performance starts going down.

DWS: Their highly extroverted and their doing..... adv. take personality, needs

INV: And they just key... you can't just keeping giving them more e-mails or their performance is going to keep going down, so what you need to do is give him another kind of thing, you need to give him a voice call now, you give him 3 e-mails in a row

DWS: So pattern could also be as you assign them, as you discern certain patterns for this agent and then you begin to proactively change their work, that's creating new patterns. Well, when I put him on e-mail for now, I'm going to put him in this queue and then I put him on this

queue, he does much better than if I take him off e-mail, put him in a different queue, then put him in this other queue. So this ..?.. self-feeding.

Right, optimizing.

DWS: Yeah, that ....

Yeah, that raises another dimension to this and Kathy probably has already figured this one out. Okay, so your moving this agent around based on their behavior patterns. Now as a contact center supervisor, how do I show that I am using this agent...\

Optimally...

Optimally.... Well that's something we need to consider. ..?...

That's an interesting question.

Because it's like we don't want to ding them because they move every half hour to a different media type or some other dimension because the pattern has indicated that that's the way they work, they need something new every half hour.

Work today, there just having an off day. So I want to move them to different work, their not feeling well today or whatever happens to them... but usually it sta it would probably a good day to just be an e-mail.... well, ...?.. no.

Yeah, you did raise that during our discussions where the supervisor might be aware, in a manual situation, the supervisor might be aware that a certain person has laryngitis that day. Well, you don't want to give him voice contacts....

No matter what their trend says, it's going to be ... Dest

DWS: So with that in mind, with respect to the inputting all these metrics, is the stuff that you collect, you can collect right now from existing call center data stores, or are you going to

be creating new... you have to input new data, new tracking mechanisms to do all this stuff.

INV: Well, part of it is the combination of data like Sarah mentioned earlier.

DWS: Your not tracking really, or are you tracking success... I thought when we talked about what it had done, a lot of call centers are not tracking... if it's not a successful sale, their not really tracking what happened in the contact.

NV: That's why we have to have access to whatever application data there is, so if they've got a seibel system or something that's tracking the outcomes.... I mean... we

DWS: What is seibel?

Seibel, CRM application, it helps the agents do their job so it has screens that are specific to the type of job their doing.

It has the business data....

So when you call in and give them your customer number, then the information that they have about you would pop up and they would have a place to order entry or whatever it is that their task needs to be for fulfilling what you need to do. But that data, we could... there are systems that collect that data, it's not collected in the call center or the contact center database, but it could be linked through the agent to the call center information. That's what we need to do.

DWS: So I think there is really two parts of this, one is the module that identifies trends... and then the module that does agent assignment. Is there...?... it's ...?... flipped over. Is there

Data | Collection

a quick for that

the rend in

anything in the trend identifier that's unique or novel where we can put flowchart forms.

How would we do that? Because presumably this thing would be going continually. It would be examining old information and new information and it would be doing it on an agent by agent basis, so....

Realtime too.

DWS: It would be .... it wouldn't ....

I the same analysing

I think there are some.. I don't want to rule out the historical aspect because there are some trends that repeat for a longer period of time.

No, but what I'm saying is you... it's a trend over a long period of time, but we want to apply the information from that trend to next event.

Well, just like you were saying, even day of week, whatever.

So, there's something else I'm hearing too, is that we need to consider the pattern that we set #00 up for the agent or that the system has set up for the agent as it relates to the scores field. So, if I say, no, you know, 8:00 to 10:00 in the morning I want you to do e-mail and then I want you to do e-mail and then I want you to do e.\*\*—titrnoon and whatever that pattern is, and then I want you to work with our

-17-

Trend Trend

gold customers at 1:00, when you get back from lunch, what impact does that have on the agent or some of profiling perspective all of the other agents that I've profiled that way, how are they performing and has the template that I set in place for the agent, where the system has set up place for the agent, what impact would we expect it to have on that particular by the system agent. Does it seem to be smart enough to do that? I hope I explained myself well.

so what your saying, the question your asking is how do I know the agent's actually performing better. Is there performance, you know, improving over time. So you have to have some metric that measures an agent. All the some metric that measures are agent.

John May I just stack the deck against them. I mean that's really my question, you know, and I certainly don't want to do that, I want to run it as optimally as I can, but somebody's stacked the deck against them.

It's kind of critical that this particular idea that we have some measure of performance, because otherwise, your right, it's like, well we're doing all these funky things, time of day and day of week, and we've gotten these in, you know, this agent does better in these kind of events, at this time of day and we're making all these decisions, it's like well, are agents actually doing better, with all this. I mean that's sort of a bottom line question that....

Interesting, well I think there were two things in your statement, Kathy, and one is how do

I show the agent is improving in their performance, but you also talked about comparing to
other agents, that becomes a real challenge when it's not apples to apples because different

O gent Perb agents are going to have different trends and their going to be assigned different tasks based fon their patterns.

I think, what I thought you were going to say also is that you probably want to assess the performance of the center of overall, so given the kind of traffic that you had, wherever it came from was of this type, what was your potential and then how did you do against that. Because when your talking about did the agent actually do better, I think what your asking is, your asking us to assess it against the road not taken and I'm not sure how we do that. I mean, we can do some kind of a simulation given the kinds of traffic loads that we had, and the mix, but that's getting to be quite an interesting project. More along the lines of research, I think. And I guess I was thinking that the one thing we would do is, at least to start with, you take the trending information and feed it into your scheduling package, so that you start to rearrange your agents based on what you think their preferences are and take a look at that because you have to look at your overall staffing, I mean you can't say, well, everybody hates calls in the morning so we won't answer any calls until 10:00. I just don't think that's going to fly.

Or nobody wants to answer calls to night...

Right, ever, ..?.. that's too bad. So...

soldolshow yours

There's a lot of good questions out of there, you know, how do I ...?... just performing, how do I compare them to other agents, how can I ensure that I'm not stacking the deck against them with the templates that say and we have selected, right. Based on history, this is a simulation piece, if I change the pattern, what, in fact, would I have. Yeah, there's a lot to that isn't there. It's very very deep. But it's something that's really trying to get at the under

Questions

current of how am I performing and how can I ensure that I'm performing optimally. And out there in the marketplace, if there's a way I can do that, I have a huge competitive advantage.

So, I'm going to have to leave Doug, what do we need to do in order to make this work?

I think we need to just do a flowchart of the pattern of the trend analysis module, the call

I think we need to just do a flowchart of the pattern of the trend analysis module, the call handling module, we would just, or the agent, whatever, the contact handler we would just do the standard flowchart and then just have a box saying where we would overlay the trending information as part of the decisions as to what call gets sent where, what agent gets sent where. ...?.. have that ...?.. for this... Lets see... I guess we don't have them. ......

Yeah, I guess, I would think may be you would start with having the trending analysis go to the workplace management system and then having that adjust the agent work schedule and also by adjusting their skills. What their going to get, you know, what their available for, during particular times... at least start that way, rather than trying to bite off the real time pieces, because I think that's going to be trickier.

...?.... You have a ...?... it doesn't stray ..?.. key to this is, well I don't know, did we talk about that...

They handled this event and they didn't do very well at it right now, so now we're going to

How Chart

-20-

change our whole.... I thought the whole idea behind this was, we got this pattern over time that we collected and we're going kinda try to stick to that, you know, for now, we're not going to change things on the fly here because they did that at the last Right because we did not want to make the assumption of just because .2. Tost contact

DWS: ...?.. we just start with the flowchart. Just, I guess the first whole that we start, the next one would be next agent... so start... select agent, then what are we doing for that agent. Select time of day, select ....

I guess I was thinking of a different flowchart.... where ...

DWS: Just draw it on the board, if you don't mind.

that's a trend.

INV: ..?... side here.... I think we're going to be drawing on the board, so ....

Okay, well, make sure you write clearly...

Okay, I'm going to have to stop right now.

So far, he hasn't written anything.

to collect the matrices that you was for transfer Somehow we have flex...

electrics.....?...just for .....?....

I guess through this process, I just want to ensure that, and I'm sorry for all the brainstorming here, it's probably not the appropriate place to do it, but we're still in fact with what we've already conceptualized and I hope I didn't derail us to a point where we're not there.

DWS: No, I guess what we're focusing on is identifying how we're going to approach the patent application as far as the different software modules and the key one here is the pattern or trend identification module. And that's what he's putting upon the board.

INV: Oh. okav.

It's ...?... I guess, it's like collect the metric and then I'd say you'd have to identify the patterns. Collect the metric, identify patterns and then as Sarah was saying, and I think we need to think about how this should be done and our realtime environment, but I think the simplest first step would be to feed this into a workforce management application and that would be into the agents scheduling.

Are we then saying that we need to have a work force management application in place in order for this to be a viable product for customer.

I think that would be an example, Kathy, I don't think we'd want to say it's a hard and fast rule that you have to a work force management package.

Right, okay. '

Kathy, does the work force management packages get down to level of saying that I want this agent to be working on voice calls for this time period.

That's a really good question, I think the work force management will get to the point where it says I need an agent to work on voice calls for this time period, not a specific person.

Flowsha

HIWI

With work force management today, I assume, I believe they have, okay, this agent is scheduled from 8:00 to 5:00 with a lunch period between 11:30 and 12:00 and a couple of 15 minute breaks and then bate training plans in there, so it probably does not today get down to the level of skills and ...?...

That's correct, they don't tell you, you need 5 agents on in that skill set, to handle voice calls, so I'll need 5 agents to handle gold voice calls coming in between the hours of 8 and 10.

Yeah, so work force management is probably the wrong thing.

Well your going to need a package like that to ensure you have coverage, so the example I and the possibilities where I have would teach, but I wouldn't make it so that it's limiting and other possibilities where I have customers that don't have work force management packages. So, to Sarah's point, you know, I got to make sure that my calls are being covered, as they come in.

Okay, so you have this agent scheduling, I'm trying to think of a word there that where it's, assigning queues verses, you know, primary backup reserve. I don't know what that is hulp called

Well, I call them agent templates, if it's at the agent level, what is their template, what skill sets do they have and are they a reserve or a backup or primary for particular skill or service class.

So you think the agent template would be updated based on the patterns?

It could be.

That makes sense.

Okay, so based on this agent template, that determines what types of contacts that or task it doesn't have to be contact, type of contact or tasks that is assigned to that agent. It's one of

overviding

the factors in the decision, it isn't necessarily the overwhiting factor. Does that make sense

It makes sense, I want to make sure that I have coverage for all the work that's coming in to it's appropriate level, service objective or level and I still want to be very fair to my agent, I want to optimize that. Today I can say I need 5 people on voice for Gold of the morning and then I can run inherence reports throughout the day to see if first of all the agent is trying to perform in those tasks and is the call volume of these calls because it is easier, coming in at that rate to still say that I need 5 agents, may be I don't now, may be I only need 3 or may be I need more, may be I need 10 depending on the call volume coming in for that particular skill. So we have to consider the inbound work volume and how that impacts all of this trending to.

Yeah, so you have to consider the contact center environment and how that factors in and how that maps to the agent templates. That makes sense.

DWS:/So the agent templates would include basically the agent profile plus any trend information.

\*\*Ak\*\*\*

INV:/ And they\*are history, right which would be the trend I think your talking about and those

And they are history, right which would be the trend I think your talking about and those patterns.

DWS: So are we done with that flowchart?

INV:

I think so.

Well, I do think that we... don't we need to expand a little bit on that collective metric.

Oh come on, as far as the operational data and the business data or .....

 media, what kind of customer type.

Okay, you want time, event, results,

DWS: Media, customer, type

INV: And I would include like....

DWS: ...call type

....media customer type as type dimensions that are variable, so a customer could define what dimensions they want to build this around. Because one customer may choose customers,

throw it... I think the easiest thing is for you to look at what I did, save me the time.

Basically, this is what happens in this box here, you start, you select an agent, then you retrieve the historical data in the agent template for the agent. Historical data is basically this, in the metric. It's just.... whatever information you have accumulated about the call and the later to this agent, just get it. Then you select the criteria to perform the trend pattern analysis and that's kind of free floating because there are so many different ways you can do it and we've gone through a lot of those during the meeting. Then you analyze it for the pattern, then you update the agent template to reflect any patterns you identify, then you just get the next agent and just repeat it.

INV: And this could be, I mean, and this process could be done periodically...
Yeah, this doesn't strike me as a realtime thing.

DWS: No, it's based purely on historical. Now what happened 5 minutes ago all of a sudden is historical, so it's not realtime. I mean it's near realtime.

NV: But you could run this like once an hour or it could be continually going on through agent over a period of time and it repeats every hour.

S: And something else you could do, you could do...

INV: "?.. do once a day... depend un

It depends on what your granularity is...

1.2... opt to do.. sp many contacts to, so you know, if I have lots and lots of interaction during an hour, I might want to run it by you know every 20th contact or every 30th, whatever that number is.

DWS: And something else you could do is you could... and they may be doing this already in call how centers, but you could, for each agent, kind of a trial period where you identify the strengths and weaknesses of the agent by putting them on different, in different situations and then monitoring what happens and then you run each agent through the same set of exercises and when your done, you kind of a base comparison of apples and apples among all the agents.

And that would be... you could use that preliminarily to identify some early trends and then just kind of use that to guide the trend analysis down the road.

Houshout

Pa leu Identity

INV:

over time.

DWS: And I suppose you could even do, you could even give personality profile tests which would give you an indication of how you want to structure that test protocol, if you will, or that series of exercises, that are just standard exercises. If the guy is an introvert, you may want to focus him more on media that don't require live contact and see how he performs....somebody ... extroverted, may be you want to do a different protocol that's focused more on live contacts and different types of live contacts.

DWS: Yeah, and I'm not sure we can really throw that in claims, but it provides nice background of how you would initially start this thing going. And then over time, the agent may grow bored with his job duties and want more challenge which means he want to work more live voice.

INV:

Well I think we need to make it so that when you start up the system, you can manually design those templates for an agent based on what the supervisor knows about that agent whether it's through testing or actual experience, but then also, I've, based on Kathy's statement about modeling, at some point you may run them modeling... and indicates that may be a different template would be different for this agent, so you go in and redefine the new criteria or, you know, tramers within the template and then you try that out and over time you try just to make sure that new template is working out. So I think you need to be able to, initially set it up and the potentially manual change later in time. If you have you say about 37, out, they think that we're starting off being very Yeah, you know, when you say about 37. out, they think that we're starting off being very

No, I don't know that I can make that assessment. I think it'll be good in some cases and may be the agent won't be happy, but their performance will be optimized. But the business will be happy.

Exactly, which it would be really great if we could feed the training results into the identification patterns.

I think I have two single results, not just the testing results. What is the ...?.... training you took. How does that compare to the group of people that came out of the training.

But I think we're going. I was ..?... now...

DWS: I think, I've got a pretty good idea of what's going on and I think can write the application now. It's going to have a lot of blanks for your guys to fill in. I wanted to find out about inventorship. What did each person contribute to this or if you can't really break it down, just confirm that the group kind of collectively come up with the concept of pattern or trend identification.

-29-

## 4366 - 145

the problem arises what people are dong now and what their not doing. And then we can move on to the invention... we'll just put ah.... we could just draw a system diagram when the call center with agents, come up with a name for the module that's handling this and I would assume we could use the same drawing on all three of these. And then just do a flowchart of the module that's collecting the... is this true value... collecting the information and then there would probably be another simple module that whenever a call comes in, you would access the database, look at the records and do a simple comparison of value verses estimated waiting time and Gold ..?.. call center... I didn't realize there's a ton of patents in this area.

INV:

customer is, the organization in determining how we're going to deal with that customer.

That's the sort of...?... problem. In other words, we have there's a lot of information that's kept about, you know, may be what kind of customer as there and you know, what kinds of, you know, abilities we have to service that customer... same... we're going to try and figure out what the actual value is of a customer.

Okay, I think the basic problem here is that we don't take into account how valuable the

S'PICAR

INV: Yeah, demographic ...?...

DWS: Frequency of contacting the call center...

INV: But most of that is trying to predict the profitability... or not profitability, but the revenue that

a customer would drive and what this is trying to get is the profitability so one of the things we talked about was we don't really get kind of a handle on the cost of servicing that customer.... where both my initial sales cost as well as and cost/in servicing... so I might have a customer that calls all the time and I don't, I may think that customer is profitable.

DWS: I have a few of those.

INV: ...?....

Imay think there profitable goals, but it turns out because their using very expensive research or whatever and once I know kind of their true....know this true value, I can move those customers into becoming profitable customers, because I could move them to either self service or other things that are improving their profitability. Because right now, I think what we do, is we focus on revenue generation and not what it's costing me to generate that revenue. In fact, you might have a customer who buys a moderate amount, lets say, from you, but does it in a very cheap way, so you use your web interface, so whatever which doesn't cost you very much. They never call for assistance, they just... their cheap, it's easy money in a sense that the margins are good. Whereas, you might help somebody else who is a high revenue customer, but also is a high cost customer because their constantly under sales. The sales or for whatever using the most expensive resources. I think that's the big part of what this one was. We've got a lot of data in the call center that says what your costing and you haven't used that in computing your true value. And then making the right decisions based on your true value.

DWS: Once you know the true... well, your looking at the cost so you could.... oh, here it is, yeah...

vour doing... once you determine the cost of servicing, then your subtracting that out from

the revenue and your actually coming up with a net value of the customer. It could be negative, it could be positive.....

DWS: So revenue would be basically items sold, less items returned. So you would consider returns.

V: ...?.. should include that in here, yeah. You ..?.. understand true values. So you kind of see and I think, in a way, customers... many customers... a lot of customers look at pure revenue, .... the of the cost in the of the of the cost in the of the

DWS: Has anyone 2.2 knowledge in the call center ever looked at revenue less any cost ... Men.

INV: Not that I know of.

DWS: But just even the idea of reducing the revenue figure by cost is novel. Then we drop down to the.... I think, within a call center application... I mean accountants do it everyday... but are we doing it to identify the value of the customer, this is the...

INV: In the past, ....? talked about like lifetime value, that their computing a lifetime value and some.... you know, I think that's been vague enough, or just thrown out there, that it could hold the past and said include, some people could have .... in the pastes; that oh the going to track down...?... and there's my profitability. I don't think it's very common.

DWS: Do you know for a fact that anyone's done it or is it just conjecture.

INV: I don't know....

DWS: I would claim it that way, where your and I would do it in an environment and the environment is a contact center where your allocating resources based upon a value associated with the customer, wherein the value is a revenue less a cost associated with that

INV: We have one claim around I would think cost alone.

customer. And that's basically the claim. And then we...

DWS: Or just any cost.

INV: Or just any cost, okay. ...?... then you. ...?. the various cost.

DWS: That's good, cost of returns which is self-explanatory, cost of sales which is

INV: Cogs.

DWS: Cogs.....

INV: Well, no, and usually ....?...

And it's also there's a cost associated with you know the, in fact we talked about that .... r sale and somebody calls into the center and there's a cost associated with that,

ht, you have an agent

DWS: So there's... from an accounting standpoint, there's fixed and variable costs. So we would identify both and the cost would .... wherein the cost, the cost is fixed, then the cost is V variable... under fixed costs, we have costs that get sold ..... Does that include variables

INV: ..?.. variable...

Fixed cost would be... It would depend upon how many sales ...?...

	DWS:	Overhead.
	INV:	Overhead? the total cost of your pulsura I
		Electricity for my center, from my center?
	DWS:	Variable costs would be costs that fad sold.
	INV:	And then this contact extends And thet-costs that errold. It's been a long time since I
	DWS:	And then this contact extends And that costs that get sold. It's been a long time since I
		took my accounting class. That's determined based upon There's no overhead allocation
		in that, that's purely based upon
	INV:	
	DWS:	So the manufacturing costs define a manufacturer would be if I'm a retailer and I'm a middle
		man, it would be the cost I get charged for the item.  Any thing I can attribute to costs.  The costs of costs in the cost I get charged for the item.  Any thing I can attribute to costs.
Invent	non	?
Mar.	DWS	This contact expense and apparently there's a variable and a fixed cost associated with that.
		Why don't we talk about that?  Have are
	INV:	? more So, I think, equipment costs, sometimes my network transport could be
		variable and state and I could be depending on my type of media that take in the? but  800 for 9 and that kind y thing
	50	I think I can buy under the service variable rate or With? things in
		the contact expenses, I don't really have the actual inaudible
		due to all talking at the same timevariable? agent? estimation,
		okay, this is And I have the big so you have for each cost or agent time
	h	we agent Well I think your I mean your agent cost is variable in the sense that, depending

11 is

on how long you pay with the agent, you netted a transaction or a contact related cost.

And you could actually calculate an average agent cost per dollar revenue...for a particular

transaction for that customer.....

How much time it takes you.....

having that

There are fixed costs and..... associated with A. agent ... Here to

Right, sure.

DWS: So there would be an overhead allocation for that specific agent, then he would have to breath it down in days, break it down into hours and look at the duration of this contact.

INV: All the contacts for .....

DWS: All the contacts for this customer...

INV: For this customer...

DWS: And then allocate the overhead with that.

INV: And which, like she was saying, it includes every contact with the customer whether there was a sale or not a sale and I mean... a customer may call in, talk to you about buying something, but they don't buy anything, and then they call you 5 times and finally abquitting time they bought it, and then after they buy it, then they call you 5 more times trying to figure out how to use this thing and .... It's all, every contact that that customer makes, it does

Now, when we, and you have this down here to, but one of the variabilities in variable cost, would be you know, the ...?.. of the agent that require, so depending on this particular was being the it's customer, for whatever reason, made it the product their buying requires a higher skill level, so it has a higher cost, so the average cost really should be the skill level.

SUM

Well it's really the ..... she sound....

Oh yeah,

So yeah, this time they contacted a chief agent, so that agent's cheaper, and so that's going to be factored in verses other time they contacted ......expenses

DWS: So you could split your agents up into groups and you could do.....

INV: You could "Laverage to per agent or agent group." And you probably want claims around both of those.

INV: His overhead.

INV: And we do have ....?.. that's pretty much the way a maximizer works. The more skills I have, the least likely I'm going to get things to work, because my of my opportunity.

DWS: So that's where you ...?.....

INV: Yeah, yeah.....

DWS: So we have to be careful that we're not focusing on hypothetical cost here, this is a hard cost

"2 consideration.... this is a reconsideration

DWS: Yes, you could have policy through a service center, presumably whatever queue their put in has to be serviced within a certain period of time and issue.... this would be, when you have the flexibility to make this decision, you would do it, but as you approach that policy criteria, you would .....

INV: potentially ...?....

Potentially or not.... I mean, they would have a choice.

I mean you could still... I mean... it gets complicated because you could say, well, ...?, if my service of the highest value it's going to be is, ...we predicted it's going to be obvious that expected

represented time, then fine, lose them, we'll take the one that's out of bounds. But if not, we're definitely going to go with the personal when the thing will be that kind of thing... I mean,

business ...?.. can get pretty complicated, but...

DWS: Then you could also, that one case we worked on, one of the things we talked about was

in Q

offering alternative service arrangements for somebody who is here and may be the value

would be used to identify whether you want to offer the person to go whether the pe

INV: Message from ..... trial website....

DWS: So this would be used to allocate the agent from a group of agents or to allocate different types of resources to the people waiting in  $\mathbb{A}$ .

INV: .... of service... You got it.

DWS: The agent cost is the summation of agent time...

INV: Historically agent time .....?....

information 20 years ago.

DWS: Oh the agent cost could be historical or because over some predetermined period of time presumably information will get stale at some point.

I got a customer for 20 years with the devaluation of the dollar, it makes no sense to include

INV: Yeah, and that's true, this would need to be refreshed with each interaction, right, my true value needs to be recalculated with each interaction or at the completion of each interaction.

And I'm assuming that it relates to some period of time and I think you could do a wait that it is the sound of the country of

DWS: That's a good point.

INV: ...?.. take that little business scenario thing that I wrote up and we talked about that having...

| wat | 3 |
| this particular company will wait the last 6 months, you know, heavier than the time before

that. But you would really want to make something that's ...

calcular

Administrable or whatever ...?....

Yeah, how they want to do it, how do they want to wait it.

DWS: With respect to agent cost ...?.... this is all media types, right. Really this should be resource cost, shouldn't it.

INV: Yeah, it should.

DWS: Does this include automated or human resources. The agent cost is equal to the summation of the agent time, does that basically do.... what he works every day? 8 hours

INV: No, that's just ..... it's ..... a time for contact....... for this customer..... so the summation for this customer for each contact the time, times the cost.....

DWS: Sort of dollars per minute probably. And that would be a combination... no that would just be... cost is for the agent, cost, contact is this,.. okay, so aren't you double including some in the cost is for the agent, cost, contact is this,.. okay, so aren't you double including some in the cost is the cost is the cost is a you go to agent overhead, then you have fixed cost and contact expense, isn't that a double inclusion.

INV: Lets see ..... the variable cost would be the agent cost plus the fees in overhead.

DWS: But the agent overhead is going ....

INV: It's fixed.

DWS: It's fixed, so when would thin be variable, would it just be agent cost or the variable cost because the fixed cost is going to come in through the overhead in the prior equation.

INV: Well, I guess it depends on how you do your accounting

of the agent.

DWS: So your right....

INV: Well it's a very variable cost but then that cost associated with a particular contact, because

there not, we're not paying for that, you know, so many dollars per minute for these things.

They want by

Well, ...?.... the agent..... So the contact stands is my variable agent cost plus my variable non-agent cost, plus my fixed cost. I mean that variable overhead, I 22 pretty much if you do a substitution...

 $\overline{\text{INV}}$ : The time the agents not handling contacts, because you will got to pay the agent for  $\mathcal{A}$ 

and sitting there for ... Calls

DWS: So what's the dollar value or how long is ..?...

DWS: Cost per Contact

INV: Think of a better way to say that. There still working, but it's not contact related.

DWS: So why wouldn't be captured in agent cost for time?

INV: Because that's per each contact.

yw

That's the time ..... the contact with the customer.

## **EXHIBIT B - CONT'D.**

So that's where you need... and you can't really allocate the out of service cost to each customer.

You don't want to.

Well, she'd do it somehow on a percentage basis ....?.... But if I am working

It depends . on what you do it are doing

Your not going to charge any one customer for some ...?... Is that what you were planning to do, is allocate some add-somy additional kicker on that this is costing me for each customer. Because you could take, say, it's ah... this person costing me a dollar a minute,

now I know that his occupancy is only 80%. So are you going to take that dollar a minute and bump it to a \$1.20, withough that's not quite accurate. And say that's my real cost from that agent because that's his productive time. I have to take his cost and move it into his productive time. Is that what you were thinking of exemutally doing? Because there's no way you could do that on a day to day basis to say, oh, you have 4 hours of training today for so those suckers who called you during the other 4 hours and I think it doesn't matter, because you either use the dollar for everybody, or you use the \$1.20 for everybody, I mean relatively speaking. So it doesn't matter if what your trying to do is understand how profitable your customers are as long as what your doing is comparable for the agent. And you probably did it, probably didn't .....?....

I don't think it matters, I think you decide your name is... you know the plumber charges you whatever \$35.00 an hour or whatever because your paying for that expertise and not...

DWS: And his travel time.

... but close to it.

INV: Right....

DWS: He doesn't bill you for his travel time.

Okay, so well, I mean, we had it simpler and now we added this in, I'm not sure ... think it was in a discussion I was handling it for out of the Well, it was a good idea. DWS: I mean he called it out. Because it is something that needs to be mentioned. So we do just a simple call center and we'll plan on using that for all these and then we can do a couple of quick flowcharts just on the module that tracks the information and updates the database, then modular decides calls. INV: But we want to stick with calls opposed to contacts ..?... DWS: No, it's got to be contact. INV: Okay, so you can do cheaper media than calls. DWS: Okay. I'm thinking of a multi-media call center where it ...?... Okay. Yeah, we went through this on these little automated agent things we did, remember we went through and identified and defined the contact center, I'll probably reuse a lot of that. INV: That's good, that's fine. DWS: For this one. So you've got your switch server. INV: Yeah, so we draw on this ....?.... outline ....?.... very well. ...... should be..... Okay, so we're .... in the claiming mode. DWS: Just a simple multi-media contact center. Just draw like what with an agent ID or yeah.... It's a box......

Is a box okay..... multi-media ...... boxes it's a solution ...... But we don't patent solutions, we patent boxes. Don't put it back, throw it/away. DWS: You shoot like a Nugget. INV: So you have your .... ...?... media coming in.... Well what we had is truly multiple boxes. We ..?.. show.... like a black box.... you have voice coming in DWS: What if we do a PTSN and a data network... INV: Yeah, we could do that. DWS: Have it be more ..... INV: Something you may be already have a picture somewhat ... 1. PTSN ...?.... your going to have your Internet or something to ..... DWS: Just call it data network, it could be a .... INV: Yeah, data network. that you could bring in e-mail, bring in... ..... customer out here..... DWS: Yeah, we should do one off each cloud. INV: Yeah, no doubt that work with the customer too. DWS: This call with a communication device. INV: And here .... it's coming in ..... really at the Internet, right? Yeah, but he wants you to call it a data network, so we can include in the wham, wham, whatever. Private public .....

So these are .... this is two kinds that are coming up to here, though, right.

Well, I mean....

And ...?...

In essence, it could be IP voice

It could be voice, that's true

It could be ... ..?.. e-mail, it could be anything ... fax ...

So this could be ...... another kind of device here....

Okay, then so inside the box, do you like to show anything in the box?

This is the contact...?...

DWS: You should show a database, and we should show the module that's tracking and then we should show some kind of a work allocator or item.

INV: Yeah, kind of a...

DWS: Item and allocator.

INV: Router research....

DWS: and queues, we should show queues, item allocator, a tracking module...

INV: But you already what you want, so why don't you just draw it. You know this stuff.

DWS: ..... and you guys and correct me.

INV: You've got more ....?.... less than us.

DWS: So it's bigger, we'll call it ..?.. server..... really it's a multi-media server... We'll have some queues....

INV: Call it work queues and H... queues that your looking at.

DWS: I'm going to put the agents hanging off the other side.... these are work items, then your

going to have a .... What's a good name for something that allocates work items to agents? INV: Work distributor ...... DWS: some kind of an agent. INV: Work distribution or Work distribution ....yeah, work distribution actually. DWS: You could also call it resource manager I guess. INV: Yeah, resource ...... And then that's going to talk or .... you need a box that's going to say here is where the invention is, right. You have the database and then you have something that's talking to the resource manager and talking to the database ..... coming up the true value. Actually, it's not just a single database either ... It doesn't matter, we can reference ...?.... DWS: Well, you'd have a customer profile... means we are storing everything. INV: Who do you say .....?..... What' not in our single database, for a logical data beautiful thing. We have a link to anything else you want ...?... to find in a logical database. DWS: So we'll call this then the.... this is the key, what are we going to call the guy that watches the database... that collects the information, updates the client profiles or the customer profiles and then feeds that information to the resource manager. ..?... this is the invention. INV: Yep, the true value..... calculating engine... I don't know, possible..... true value sounds like a hardware doesn't it. value about ...... like, no.... value, I know. DWS: And I guess there's something here, there's really two ways to look at what you guys have



done over deciding the name. Your looking at, your offsetting revenue with cost, but you could do this purely on a cost basis. Where if, I'm selling widgets and there all the same price, and Ires. I'm more of a resource driven....inaudible due to talking at same time....., yeah, yeah, I may want to just purely focus on cost so when we do the claims, I'm reluctant to put revenue in as an element in the broadest claim. So whatever we picture should have something as far as cost in it, because when the Examiner sees that, typically what they do when they get a case is they read ...?.. or read the summary, look at the claims and look at the drawings. So to try to get him away from all that stuff that's out there, all those multitude of patents we're talking about....

DWS: I want to pick a word for this agent that has cost in it somehow.

INV: Cost or expense or either one.

DWS: We could say cost tracking agent..... cost..... or expenses is another one.

INV: I guess that... I'm thinking more.... tracking sounds more passive and not do anything....
...?... determination rather

DWS: Determining agent....

DWS: Well that's going to be the prime embodiment we talked about is what you described. But

#

INV: But it is... but, I think the other thing is true is that we're trying to associate possible particular customer.

DWS: That's why it's associated with the contact ....

INV: Yeah, associated with the contact, but when you contact, it you could consider it one inferaction, you know, especially when we're identifying the cost with the customer, finding the cost to a customer.

Yeah, ultimately, what we'll come up with here is, like you said, it's just a number that says there's... this is where this customer falls in compared to everybody else.

DWS: That's a good way of saying it.

INV: So I say customer, yeah, I think you definitely have to have customer there.
...?... customer cost define it or something.

Something like that.

DWS: Because, your right, if your just looking at contact, well, everybody's going to have the same cost.

INV: Well depending on how long they take, but ....

dement

INV: A customer ...... that sounds .... to me.

DWS: A customer .... is well used ....

INV: ....inaudible due to talking at same time....

DWS: If it works, I'm not going to throw it away.

INV: Your suppose to put them in upside down so those ....?.... right. And what gravity, take these down. I don't know.....?....

I have no idea, if that's true that .... inaudible due to talking at same time.... an invention where you don't have to keep them that way.

DWS: Customer cost....

INV: Cost assignment and.....

astome cost

DWS: Assigning agent.. Agent's a hot word.

INV: As long as you don't have to be one.

Actually, that's my idea of purgatory.

DWS: Okay, now we're going to have the resources and we should have ..?.. agents and I'm thinking what I'll do is just draw a human agents at a work station.

INV: And then you just have... you could split out self service voice and self service ...?.. or whatever you want to say...

DWS: Just call it self service voice. IVR.

INV: IVR is what it ...?...

IVR verses ....?... web ...?...

		/
		It doesn't have to be web server where a product automatically
	DWS:	IVR give me some other ones to do that. So you have e-mail server
	INV:	Auto respond. And then you have? base self server so you'd say.
`	DWS:	You know what we could here is call it automated resource and then we'll bring that out.
	$\bigvee$	Yeah we're based so, we're doing oh we got to do a flowchart next? before
	$\wedge$	we erase the board, let me get this down. I want to start Bill Walker, he's one of the
	U	engineers who helped me start bringing a digital camera, take a picture of the board
	IXV:	$Actually, my \ brother \ invented \ some \ software \ which \ will \ read \ an \ image \ in \ like \ that, and \ clean$
	$\langle$	it up, it'll straighten up your lines and align everything up and make your writing legible and $$
		stuff.
1	DWS:	That's a great idea.
•	INV:	And now they've got white boards that have little cameras mounted on them that take a
		picture before you leave.
	DWS:	Okay, so we're going to do Should I just call this a media server, rather than a switch
		server?
	INV:	multi advantage?
)	DWS:	So then we've got
	INV:	A longer switch
	DWS:	Multi-advantage here generic?
	INV:	Oh yeah, she means Avaya call manager
		No, communication manager
		Communication manager

		Oh yeah? Avaya know a then the brief would be ACM	
		No, but your not allowed to shorten Avaya, if it's a real Avaya ACM, you can't say ACM.	1
		It's a new? guidelines I don't think I see the file	-
w	)	So I didn't know it was official or? everything in multi-advantage. I've never used it	
•		in?	
		I know, I will.	1
	DWS:	We work on show human agents at work stations. And then we're going to have	
		automated resource, these could be IVR, e-mail, automated response and web-based. Okay,	
Ŋ		now lets do the flowchart. I'll be? you guys can go ahead and tell me what the	
		?	
	INV:	Well the flowchart is kind of a process that how this would work is what your saying:?	
		Starting with work coming	,
	DWS:	So we're going to do two	
	INV:	? my history, does that happen before work comes in or	
		Well, no, I mean you got to?	
		Work comes in and you either have history or you don't.	1
		Okay, so that's our first decision point.	1
	DWS:	So we're going to have 3 flowcharts, we're going to have the post, whatever that was,	1
		assigning agent withcall back. There's going to be two things, update and provide ik So	
		it's going to collect and update and provide. Those are the two flowcharts and then we're	
		going to have resource manager which is going to query, receive and select and I think the	

first two are pretty straight forward. It's going to be on a per contact basis. so we'll start

INV: Which one are you doing the .....

DWS: This is the other collect and update.

INV: Oh, collect and update, okay.

INV: The first one the contact completes is what we were saying about... the starting point, is the contact complete.

DWS: So we should say.. contact completed .....

INV: Or interaction ...?.. contact completes....

DWS: No, yes. Alright.

INV: Alright, so update... see if you look at customer...... all the things that we said here to calculate, right, the amount of time... what you need to know is you need to know the amount dealth of time the agent start with that customer who the agent wants right, which we always ....?....

DWS: How about determine?

INV: What was the business result....

DWS: Determine results, servicing resource.... and contact duration....

DWS: Agent type and identity per person.

INV: Instead of saying contact, A: for the cost, for duration, I would say servicing duration because you might, I would include the after call work or after ...?.. because ........

DWS: That's a good point. So servicing duration....

INV: Don't we have to identify also any costs, or may be that's in results.

I'm assuming ..... it was all just ...?. my...... the result would be, yeah, I mean what you... if he was selling something, it would include the product ID and presumably you know how much they cost and how much... you know what kind of revenue you would get from that and you would also know....

DWS: So product ID's

INV: ... with the cost.

DWS: I'm looking at the terminal result.....

	DWS:	Okay, so we got all the information then we update client or customer profile
	INV:	Yeah. And that's where we might wait this, right. That might be the part of that and wait
		for the? to wait
	DWS:	Wait what?
	INV:	Wait well most recent results higher than
		for this customer. I'm determining those things, but then I'm calculating my true value which might be waited.
	DWS:	It probably will be.
	INV:	Yeah, yeah we'll have to. So I don't know if we want to step before we update the
		calculating the true value And then you update it.
		the calculation
		But you gather your input through the calculation.
	DWS:	So where am I putting the track?
	INV:	? determine them the update customers and not through wait comes off of the
		calculation
	DWS:	So I determine what?
	INV:	Calculate true value, or whatever true customer value. Just a little note
		know why you thought this was going to be so fast
/	DWS:	Yeah, well we are going to have another meeting
	INV:	We keep inventing
	DWS:	Yeah, that one that I did, that real thick one there, we just kept there were so many new
		ideas coming out of the meeting and remember the? Well actually there were two

...?.... ideas just kept coming out during the meeting. Because when you get the group together, it doesn't happen that frequently, and everybody starts talking about it, hey what about this, what about this. So next contact. So now we got the database updated.

INV: Yeah, that's one chart.

DWS: So then the other one, I think this other one is going to be pretty easy to start... and this one is basically ...?.... lets do this from the standpoint waside ...?... sy

INV: So new work comes down .....

DWS: Without even new work, it just goes in here.

INV: Well, the decision is there's work that needs a resource, right.

...?.... No there's a resource that needs work, so that's when you select among the...

DWS: How about if you say, work unavailable..., queue just came in, whatever,

INV: Work on its waiting .... waiting... But the decision query is you have a resource that can service some kind of work and you want to take, which one do I pick, right. ..?.. start is a resource becomes available.

DWS: Resource ....

INV: ...?.... start or whatever......resource becomes available. Then the question you ask is are the work items waited, right.

DWS: Yes, simple no. You could do the union job .... and for the next one I do what?

INV: Is their work waiting.

DWS: Work item, waiting. yes, no. Okay.

INV: We need to ask or include in that question if multiple work items are waiting, there's only one, I don't have anything else to....?...

	might say it s not going to be the inghest because this person is out of inines.	
OWS:	Yeah,?	
NV:	? that's good.	
DWS:	Select a work item, I think we should do this because this is what the thing is based on, then	
	in the description, going to say it would be appreciated, other criteria could be considered in the work items such as	
INV:	And then your assigned to the agent instead of resources, assigned to the resources.	
	that's where this thing goes to. Yeah, it's	
	There going to give it to us.	
DWS:	Pretty scarey isn't it that you have to think in terms of? exposure.	
INV:	That's how I started out, only I think it was in the 70's.	
DWS:	A resource	
INV:	It's generallydefinitely	
DWS:	Well there's that one so we should do one where they tag it with a queue	
INV:	When the spree comes in, yeah.	
DWS:	That's the most efficient way to do it	X
INV:	authorize	
DWS:	Because otherwise we'll have a weird situation where they have the queryevery contact	
	in the queue and keep doing it too So start, you work item, no, yes. Retrieve,	
	true, customer value alright.	
INV:	Associated with theer mark, or I don't know to say there  Men Henn  Wenk Henn  work with the tag	

	And your done.
DWS:	?start
	all those down.
INV:	Weil,? need legal
DWS:	I wish I had my digital camera here, quick read your only writing now. I don't now
INV:	I can read it pretty well it's not bad. We should are you thinking we're pretty done with
	that one, once you write it, because we could kind of quickly review one of these.
DWS:	Why don't you just pick one
INV:	go through that. Did you want to?
	It's one
	Well, Rod did One originally and I was
	Do one and
	I think that's the
	One is done
DWS:	So we'll do another meeting, we'll have to try to what's the best way to set up another
	meeting, because I'm just letting you guys now when I'm going to be here, then you can try
	to fit me in? stuff
INV:	Yeah, that's the best way to do it, because
DWS	Me e-mailing everybody.
INV:	calendar, that would be everything, I think, that's not on my calendar.
	Yeah, it wasn't on mine either.
	Yeah, so if you send us when your going to be here, we can just look in outlook and try to

		find a time that we're all, or most of us can
	DWS:	I was pulling my hair out, I don't have much to pull out, much left to pull out?
		resource and Source Okay, here's another
		flowchart
	INV:	So what it says is, the chart, is queue to call and now there's lots of agents, is not available,
		Pre got to pick the best agent based on true value. That's true? agent, here you can say
		agent available, you could be it in that one, yes. And if it's yes,
		What are you doing, your expanding this
flour	)	Yeah, $?$ different scenario. Then you select, this scenario is when the resource becomes
,		available and this one is when the resource arrives.
	DWS:	Agents available
	INV:	Work out working out right.
	DWS:	No, is what?
	INV:	No is select is select the most appropriate queue or waiting parking place, right.
	DWS:	So then there is select, yes, select, most appropriate agent and in either case, I then go back
		to the top. I go back to the new work item. I wait for the new work item to come back, the
4366-	140_	next in work item. So now we're ready for one in?
7	INV:	A couple of
V	DWS:	Okay
$\Lambda$	INV:	I think it is? other one to? I didn't erase but this one moves
/\		that go to the good, basically, you work and
		And then here what you have is sort of if it were waited from previous, and how
V	King	flow hart -59-
No	we	

	-: number	
	Or ascii number	7
C	do you determine that relation	
	We're asking them.	
	Well, actually you think you have this	1
L	Well,? continue	
ail	But in way, it goes out back well, okay.	
	Yeah, if its related. Alright so then you have some indication or I guess this could be	ĺ
	contact, I don't know how many, do we count it	
DWS:	Is that a question, that's a question related to previous	
INV:	Oh, I think you definitely count.	
	Yeah, I mean I think we said something in there about having to count, so you want to know	
	how many, so then you tag the yes part of this is here and the tag with number of contacts.	
DWS:	Tag what?	J
INV:	The contact contact	
	The word tag related to	1
	To same Then you probably qualify it based on some other things. In addition to, you the riverse of the ri	12
j,	57 but the key point there is like give a different service. If it's not one and done, then I	1
	give it different service than someone who has the potential to be one and done.	
	And so if we even talk about a bunch of possibilities	
	And this isn't so much a question as it just determine a number determine a	

number of contacts related to previous contacts. But then I would almost have a question

	2000 one and done	
	200 one and	\ /
	somewhere that says, if that's greater than Upit, go off and give? service.	$\vee$
	multiple but then going through this, I don't	Λ
	It's not I want them done and  The state of the no and goes down to what?  I like what we did before.	
DWS:	In the no and goes down to what?	\
INV:	.2 i don't like the question up there, alright2 54. I would be the question way down z	$\bigvee$
	under somewhere.	Λ
	Well you have to retrieve the information, so retrieve the number of contacts this is related	$\int_{0}^{\infty}$
	to.	
	Yes, you have to retrieve that. So rather than retrieve the true value, I retrieve number of	
	previous contacts related, or something like that.	. 🔾
DWS:	Nomber of Shouldn't that be two queries though. Because you determine the	Ì,
	number of previous contacts and then you have to determine if their related.	$\bigvee$
INV:	Well you have to your looking for.	Λ
	Well, we don't care about previous contacts, we only care about related cantacts	ta
)	Yeah, we only care about related	11
the	Agaz kung or retracting trouble ticket number or something and you just, you say, you know, find me all	
	the records that have this trouble ticket So once I've got that, alright, so I've got that $5h^{(1)}$	
	number to be 0 to whatever and I can tag it, tag it and then I can sote potentially qualify	\ ,
	what here's what you do.	Y
	Well qualification can take into account that it's, but then you decide are your agents and	صو
	yourself you want to select the most appropriate one and you can base that on those. I mean,	
	you can, but it doesn't come out clear I would put a question of	

flow

Like here
Yes, before agents available and just say, we just want them is is not one and done or
something, I don't know what to say, right. Or is this returning or whatever. And if it's
yes, it just goes down to what we've got there, agents available, like the most appropriate and
no is one. Determine escalated something or determine appropriate
treatment or  Activate a gent observing alert That's a better skill than any
business manager or executive
So it doesn't even have to even be related to only agents available? start the quality
mantoning a soluted to met notine
Mount toring  How many things :? are not even?
infestion
Related to the Fouring we have
Related to the routing us going a can do And I mean you still at a route, but other things I you as well and I could route
differently so I might have determine on apply them or something to
the rate And I don't know Doug, how you get into it, it's not just determining the
agent it's determining? the agent
talked about start
You know, starting quality monitor, notifying someone special
Notifying
? in addition. And there's also, I mean another aspect of this is a way to do reporting

Now

because I think, yes now, you didn't touch on that much, I was looking for that and I wanted

to talk about that a little bit to see if there was anything that was patentable in a claim around this. Because it would be a good test case for us to ever get a patent on . Okay, so, alright than Randy you thought there was something over here here, so.... Well there is going to be this, kind of a notion here of once the contact is complete... Does the agent think its done, this Well I need to update information about that customer, right, you still have to do that because this information if you haven't done something over here. Well, I think what you do over there is, you have to use your, whatever it is your using to determine whether that it's related to something else. So I'm presuming you already have that, you have to have something. But I don't know if we need to .... how we retrieve another previous contact... you know, if we have all these different ideas.... Yeah, when I even had one that said it's the same customer and it's within 48 hours duration or trouble ticket or whatever, but we flowchart all those, we just state... but your question really is, how did we determine that. Your just ....., all your saying is retrieving it, like somehow we've assumed we've determined it. Well, it might be better to say determine it, this is a previous contact rather than retrieve. Or we ....?... ....?.... can determine that..... It's a key, but it's not necessarily the invention

Mow

those, the use of that....

No. I mean... because I think that'll be assuming

...that prior art exists, we don't use it.

I mean I think it's kind of like the true value thing, that information exists, we're just not collect... we're just not making use of it. Or in some cases, it may not exist and then your back to this, you know, either the same customer within a certain period of time, which I think is not a very good way to go about it...

How

Or asking the customer which isn't necessarily a good way either... to say, is this related to something previous.

Well, we do that too.

I know.

I mean, that's the only way .....

And then the agent tags it. So that's why I was trying to get over here, so that the agent determines that it is in fact related to something, even though we didn't know over here... to make it go ahead and enter information ......

It deem's make sense what ...?... said to ........... to reflect that or the agent would determine whether it's related to a prior contact.

That certainly could happen.

The agent could and then do something and then we'd have to trigger special treatment postrouting, but you could still turn on a recording device and things like that.

Oh, I see what you mean.

Yeah, I was thinking for next time. You know, by that time, I mean, your pretty much finished there, but if the person calls back again, then you can get them with the agent update.

make...<del>?... by</del> sure they call with their trouble ticket each time ...?...

Yeah, you know, you never, not everyone will give you that information.

DWS: So basically, the way this is set up is they get two free contacts. One first time... is created

INV: The first time is a 1, that's fine ....

DWS: The second time they call up, there's really now way to determine ..?..that's not true.

DWS: I guess what I'm saying is on that side, that Randy's talking about, you mean, really you should, you need to record the contact itself because if you just say determine whether it's related to a prior contact and then they get two free contacts. You need to keep a record of your contacts by customer.

INV: We do that, so....

Well, what I'm saying is you have to make sure that you know, and I guess this is just an assumption your making that there's some kind of issue tracking mechanism that this company has... and this person called in with an issue even though that the agent does a resolved it, it got.. you know, record itsomewhere and so there's some... so that their customer information back, but the thing is, it is highly likely that the customer says okay, well my problem's solved, the guy says well, here's your tracking number and the guy says that...and they just ignore it, because it's like... why do I need to ...? because it's working, then the next day, well it ain't working, so I call him up, say, yep, I don't have any tracking numbers, I forgot that, so get like to a routing agent, and the agent goes, well, is this... Is this about x..., I mean search on the customers name and they say, is this about product xyz that you called and ordered yesterday, yes it is, alright, when they've got the information

And they've got the information. At that point, you could actually have the agent take some proactive ...?...

Do some of these things, yeah.

..?... well-and done.

2

Besides the fact that now we want to record it, okay, this one has its required contacts and run a report on that...

Yeah, we do. Yeah, we do need that. But I think what we need, is just the determined results ...?.. to that..... So contact complete...

Assuming ..?.. .. here

And we need to, it's not really determined the results, but it's.... yeah, alright. so.... it's like record the reason, issue, trouble, whatever.

It is sort of a determined result.... your right....

I mean it could be that the problem didn't even get resolved and it's just an open ticket now.

Right, you wouldn't even expect

That gets pretty A likely ... So we need to...

And that would be an interesting thing where you could record it there..

...there are the two basic things I think that are happening.... you get rid of this and then your updating the profile.

...doing, yeah yeur arguing and determination of the result and then your updating the profile.

Well, but is it the profile or are you just, well your updating your ...?...

Your updating the.. yeah, the, I don't now, the trouble ticket or the ...

..?.. kind of a customer history isn't there.

-66-

How

I wouldn't call it profile here....

Yeah, profile doesn't sound right....

DWS: Should we use history for the other one or is this profile okay.

INV: The other one that I think profile makes more sense, but for this one, this is more like tracking....

Yes, now this is, when we're ready we can get into the better tracking cause it can fit right into that box, or around that box. I mean you need to have the data...

DWS: So we're keeping determine result, where we're going with what ..?... said and

That's an interesting thought.

And then if I think I am and I get rewarded for that, but then I don't make it, that would be kind of fun.

I like the idea saying that, no, it's really not one and done, because now all of sudden we can follow it's generate a report right now, which is... how many, what percentage of ..?.. do we have that people contact us ...?.. that are open and their going to be getting back to us...

They know already. Or we have to get back to them either way, ...?.. contact.

I mean...

That is a good ..... So a little side, squirrelly language to be, expect.... something in that order

flow

call back... No, it's not one and done, no, not done.

Well yeah, actually, it's just .....

It sounds like a double negative.. No, I'm not. Okay, so we should we talk about reporting.

I want to get....

DWS: Before we do that, there's one thing that I saw on this that we haven't really talked about.

It impacts those two flowcharts. What you have here is another consideration of one and done is with the contact had to be served by multiple servers even in a singular interaction, so the recording that Randy talked about in this flowchart is not just a number of previous contacts, it really should be a resource base, record a number of prior resource...

That's true ..... contact completely, we just change that to resource complete.

Well, the thing is....alright, so for here, lets take this one first... I think your right, a number of previous contacts and ...?... I mean that essentially takes care of your transfers and stuff.

And I actually wondered about that in the true value thing, so what if I, what if every time this person calls I have to have my supervisor on the line too. That would be expensive person to deal with.

Yes. You should include that in ......... Surely, .... It seems to me like, if every time I've got to escalate to a supervisor or send it to a supervisor ....

Or even if it's an expert, health line.

Yeah, and then I think the cost..... but anyway, then we get over here, I guess, the question is when an agent finishes, do they have to transfer it, I mean, did they finish, really. It's low the grown have the results right there and the agent is going to say no, when their asked are you done .... so you have transfer it, the answer here is no.

frustomen d

And then, I'm still going to, aren't I still going to update my /?... to her.... But then it's next time ..?.. the right question and should it really be next agent or next resource.

Well, from whose perspective are we looking at this, because for the next resource goes around the loop again, right.

Yes, I think it should say.... I have completed the answer would be no. So that doesn't work very well. It's the resource complete.

Shouldn't it be... shouldn't contact on the top and bottom be changed to resource.

If what your doing is trying to show what the agent does with the contact, yes.

...?.... per customer, there's a lot of customers who don't want to talk to the agents.

Thank you very much. It depends on the company's definition of one and done, would be by contact or by agent. And I think that's kind of a point... So this is good other than may be we need duplicates or my definition is by agent and then I change contact to agent or you could say contact or agent, I don't know we want it... that...

Well, if the contact is completed, your going to quit no matter what. If you get down here, you could ask before that... do I need another agent for that question, say no, then you go to the next contact.

Well, yeah, I know. This is kind of weird, because this is from the agent's point of view and like, if I finish with this contact, then I get another contact.

m

Which is still always be true, yeah.

But I don't think you can do this chart from both perspectives simultaneously.

...?...So where does this start on this, the agent is not available we're saying. Basically. No, the agent has completed their portion of the contact. That's the start, agent.... may be we need a box on top that says, well, it's kind of a question, do we need a question or just saying, start with the agent completed their portion of a contact.

part of its after ..?.... isn't it. Yes

Yes it is, so then here you want to say, well actually it would be here, that they would transfer. I mean this is where determination ......?...

Is it hanging up or transfer... or whatever... but may be .....

..?.. do the transfer./

So this is, yeah, this is .....

..?....

They both go the same way.... Actually, you could change place....

Say something more like issue solved and then no, what happened do I transfer it to somebody else or do I record it and...?....

Fillow You could do that.... but in either case, I still have to pad the same track for this agent.

Now

Right, right. It's just a recording of what your did.

So it's not like it's two different tracks. Are you following all this stuff.

DWS: The tape recorder is.

INV: It's really understanding that this and that pointing...

Jow

Well, not necessarily. Well you said that if the thing came in and I couldn't solve the problem, I can't solve your problem, but I can transfer you to somebody who can. Well the ways the thirty up company policy may be that, you know, it's that Jast person that we're actually setting up and is when the country we're actually setting up a country we're actually setting up and is when the country we're actually setting up a country we're actually actually actually

result, so this guy may be sitting around the picture and since he didn't solve it, he

transferred it to somebody else.

You still have a result and the result was not solved, transferred to an expert.

Alright, that's true.

And I think that that's important to define ..?...

And they can decide whether they care or not .....

Put that in there.....

d is

No, I think that is important, because like sitting from a reporting point of view ...?....

So this is like where determined disposition really would include,... the 7. result would be

one with the deposition. My disposition. Yes, right... as opposed to.....

That exists, I already got an arbitrary ...?.... agents..... disposition. .... Gould be band...?...

yeah, it could be, I did what I could, but it's not done. Expectical soon.

Well, "...".. a lot, I mean you say, well or you might say, well I need this information in order to help you, you'll have to go get it, I can't, you know, so you say, I did what I could.... we're

going to ...?/.. them again.

DWS: So you had a statement about another flowchart....

INV: Well, no .... but I think, it was about tracking. We want to get into tracking, because of one of the things on one and done has been.... one of the reasons I think people have not used it, and some of the ways that we talked about instead of recording to blah, blah, blah... is because we can't really track that today. Because when I finish, I may think I'm done, I may predict I'm done, but I really don't know I'm done until they call in again. And so we don't have measures on our report & say, oh, how many one and dones did you do today. Now we could get some of that, by just saying the agent disposition, did you finish, and again it's a prediction.

DWS: So even if the agent knows he's going to be judged based on that ...?..., say, of course. I'm going to call a smart agent, I'm just going to ....?... record. Everything I do is one and ........

no...

INV: And that's why this is important because if they call back, and there's a way to link it to a 7 the previous agent ... See, because today we get the new call previous contact, we can in, they may tag it, but .. call him back again, but we don't really link or measure that agent, against that because we don't have a way to do that,

DWS: Well, lets focus on the different ways that you... your talking about one is trouble ticket number which you could.. they have now, you could use this in existing systems. Because there's a way there to detract it ...

logginel

Detract that this is not... but it's not.... You know, and it could be a trouble ticket system in particular. My track, how many times.. you know, may track by agent. It's not something we do in a contact center, because there's no contact center customer that a vendor that I know that has a measure for what percent of one and done for this agent. And the issue primarily, the one we started with, I think was the poor guy on the help line who actually has a longer average top time than any of his peers, because he actually faces the problem. Everybody else says, you know,

Create a ticket..

a ficket...

Yhow it along

.... he doesn't get any credit, right, for being one and done. So this was the positive measure, in key performance measure for agents that we don't have today. Now the way we propose solving that is, kind of what Sarah said, it's not that I know... it's really the recording on the inverse of that, it's not how many one and dones you did, but it's how many re.... whatever, recontacts that were attributed to..... non-one and done that are associated .... but, that's going to be pretty tricky to tract. Well what we have to do then, is when we go back and, I don't know, I was thinking of it on this tread, but I think that it might could be on this issue tracking database, but when we say that determines special treatment, we could add, you know, add the special tracking which says, look, we went retrieved my person might get, and I don't know how you want to ding the first person, or ding the last person I talk to ...

Well, actually, you know what, if we have something that relates to, so you know a case number, then you can see the whole history of the You can print that out from a contact perspective, but not from an agent metric.

understand, I'm just saying but if the thing that ties it all together is the case, then there's probably, you know, there should be a way to find the first agent. Yeah, if we

wanted, and again, you could choose how to track this. We'd probably want some choices how to track this. We'd probably want some choices the track to me track to the track the last agent. If you had yet another non

Actually, you might not even need to track it against the agent so much as, you know, oc...

what...how are we doing overall, I mean people call back for variety of reasons.

Well, and the thing we usually need that we get into the analytical stuff, so what kind of things are not one and done, so what can we do to fix that... Is it an agent training problem should that end up always or is this really the training, is this a particular part and ...?.. be not one and done is a particular whatever. May be it's this customer, this particular customer is never one and done, I don't care what we do.... so give up on it. At least we can start taking action, right that the people's house, we'd love to one and done, it's just random. Basically, we can't, we have no control over one and done, because we can't measure it and we don't do the things we talked about even with special action.

DWS: So you say a non-one and done situation can be derived, so what your really doing is your focusing on what was not one and done and assuming everything at that ..?... not one and done was a one and done. So your kind of

INV: Like, what percentage of work did we get today.

one and done today, or

Tracking

DWS: Your establishing a positive by tracking the negative.

SIX months lake

: ...?.. say non-one and done situation can be derived based on duration that's been incurred op last contact, is this what your saying.

INV: No, that is the poor man's way of deriving it... What I'm saying is even if, supposing I had a trouble ticket that I called in in May and then, you know, because the system as far as I'm concerned is one and done until I call again. Well what if I don't call until December. If I'm calling in December about a trouble ticket I did in May, that shouldn't ding anybody as far as I'm concerned, because obviously it wasn't really an issue.

DWS: So you would set that up in your database policies?—?... records after a certain period of time, and then a period of time, you just

DWS: You would still, at some point, you would have a stale built into a words to stale to track and

Tracking

I'm just thinking during the \_\_\_\_\_ all your going to say is this percentage of the things we got in today were repeats. But that doesn't tell you of the ones, that you considered, that were not repeats, how many years ..... how many become ... .... you don't know.

But you just have that way... after they... in the future and what ...?...

But that's an analytical thing, because your going to see all the time.

That's right. And you would probably want a report on it.

Your going this way, that's bad... Your going this way, it's good.

And the more often it repeats, so how many are third repeats, how many are fourth repeats, it's like I am just killing myself in not solving these problems the first time.

So there's really kind of two inventions here, one is the tracking piece, then the other one is this concept of special treatment.

And the routing, yeah. Routing the treatments. Part of the special treatment, yeah.

DWS: Because nobody ever tracked ths. His

And I think that clearly the other issues is hot too. But I, and I don't know if we can kind of capture both of those or want to separate those.

DWS: You know, I think these two flowcharts are pretty much laid out. I wanted to focus on this, the different ways you could determine whether something was not one and done. One of the ways is where your looking at the agent to provide in part, you have a trouble ticket ..? there's, even though this is a . !? 4 way of dong it, people aren't doing it, where they look at

the duration between the current and the last contact, defined by the contact center. Contact

Determiny One &

regards to previous ...?... you could have the purpose of the call, in which case, somebody would have to record that. The agent presumably would record that

INV: 706. IDI....... that's real typical, the IDI says, this is a previous thing and you say yeah, and right away it's like okay, we've got information now. And then say.... trouble ticket number..... and you could get ...?....

DWS: Well the next thing about an IVR is it's foolproof, your not going to have an agent that' going ..?...

INV: going there... meet ......

Yeah, that's true too.

You could actually, really have agents to get together and say, listen, we close it out, and we close the ...

We just always.... and we take a new trouble ticket every time.

I've been on the other side of that, there's a customer going no, this is the same problem... they go, well, we don't have that, we're going to create a new one for you here. But ....

Well, I was thinking like Blue Cross/Blue Shield, you know, if you called about a certain invoice or something, you know or a claim, they have that claim number and they can see all the stuff you said previously. I have lots of experience with this. That's just me again. And

Yes, it's the same claim, the same dam claim and they blew it again.

DWS: Did you say content analysis in here. That would presumably be a text based....

INV: Yeah, like e-mail.

Could be, but it could be IVR based again, future recognition, true.

Tracking

DWS: So what would be looking for in content.

calling in for service, please state your problem. And you could even say, well I've been calling about this for a number of times now and it is related to the product I bought on Tuesday, and I couldn't do any of that, but say, okay, calling again.... see that word, again, so they do single word or they could do .... just look, I mean, they could look for certain light things, I mean if you say, it's in relation to product x, you can just go and see ... history do they have, anything recent that was on that.

Well you could say, like you know, what is your problem, please state the problem when

Content analysis

low from

See, that's what I think too. \*\*\*!\*s like ...?\*\*n product x or even an IVR, it could just say which product is this related to, I see product x, I see this customer ID, go look up, oh, there's already purchases, oh they've already called in a problem on this, that's not one and done. I mean you could make that assumption, yeah.

One of Done

DWS: And you see post contact server results from previous contacts, this would be the customer providing my e-mail or mail whatever, just a survey, were you satisfied with your service, were there any residual issues, what were they.

Yep, one and done. Nope, ... Yep.....

..?... thought it was.

DWS: With respect to the hardware, I think the same hardware diagram works as we used on the

H/W ,

INV: Lets see you have the name for that ..?... probably

DWS: Your still going to have the resource manager, it's going to be in a media server.

INV: I would kind of like to see something hung off the hardware around the recording, so if one special of the ...f.. treatments I can do is record this because it clearly is a problem. According to the ....?....

DWS: They be ....? automated resource, it could just be one of the resources as a recorder. So you'd can have... you could attach, while another resource is doing the servicing, you attach yet another resource and the call would simply record what's happening.

DWS: You can see a repeat contact tracking agent or determining agent, is really what your looking agent at, is a re---?7. contact ...?...

INV: Yeah, we are, yeah, that's good.

DWS: And I think we need to have that second flowchart too. Yeah, because that's where you...

a situation where you have a lot of work items in queue, this one is where you have a lot of
available agents and this one is where you have not many, you have no available agents and
your in queuing things.

INV: Yeah, but your not going to make a decision, other than you might ...?... to work...

DWS: Sure you are, you may want to

INV: based on

DWS: You may have special agents that are trying to deal with problem customers....

	INV:	Problem customers, that's true. Well, and that's kind of how, I mean, pointless to
		appropriate queue.  that deal with
	DWS:	You may have a special queue that's handled by swat team members, and they owe these bad
		customers
	INV:	If you didn't know when it says
		? time customers
, Iw	)	? time customers  And part of it could be too, that some agents just aren't it exactly. You might assume
HI.		that these customers are my luck, happy customers and might want some agent you pick not
		to do the non-one and done/s, because their not very good at that. You don't want it brand
		new, it's put it that way. You don't want a novice, you want a non-one and done
	DWS:	Give them Arnold Swartznegger. What's your problem, okay, I'll take care of them.  What  "I"  "" work p. what do we say like an appropriate, yeah, but have to know what the
		appropriate 2. agent Well the agent's not available
		Well, yeah, they got skills, but you could have a question up there, skill at one and done, yes
		or no or whatever and my skills with repeat customers, if the answer's no, it's like select
		a first time first issue and water yes, and then define it to the?
		I don't know, I'll have to think about this a little. This one has a ref., it looks a little
		different? on this flowchart, different.
		I just think once you've chosen the queue which with A. agents are good at handling that.
		That's what?
		With group it's two different places and then these exacts area have I wouldn't be at the

queue, ..?.. feel that way.

Anybody that's going to handle these guys here, it's only certain ones that are going to handle the non-one and done's.

DWS: So you wouldn't have the middle flowchart?

INV: I don't think so.

Well, may be not true though, right, because what if there aren't anyone, special ones available, what are you going to do, make them wait, wait, wait, wait.

all one.... but it's all based off of what you did over here. Now you could put where it says, select the most appropriate queue, and then you said put in appropriate priority. Yeah, give it ...... priority, whether it's in the queue or whatever else is...?.... Yeah, we could do the service... My service level could be level....

HW

Yeah, yeah, we could do that.

Goals, I guess you could call the service goals....

So, you would have this flowchart of 15

I think we've finally got if with, and nop just art, the current art is to select, on selecting working ...?... yeah..... Now this is the one, of course, that Terry acted most interested in, but she never did get any feedback ..?.. on the last one..... what's happening. No, but you know, we've got a few more ideas, if we could get through it enough, we could say, Well, it's not clearly, agent optimization or whatever the heck we're calling it these days, is her third leg iron stool..... and she, although, her could see the merge, and then next, is getting analyticat store once again with the merge product, but after had, it just stays optimization... third periods.

ideas, but I still think there's some .....

Yeah, I do too. It helps tie up things ...?... with ...... partners are, so.... whoa, whoa two

down.

DWS: Let me get my calendar out and tell you when I'm going to be back. So that you guys can

•••

INV: Are you local, I don't know. I thought you were.

DWS: My office is 15 minutes away. So.... you guys should schedule a field trip and come and see me.

INV: Hey, that's a good idea. ..... are you downtown? I figured you might be. So when in ..?..., you have a ..?.....

DWS: So when in town... You have a....

INV: Downtown....

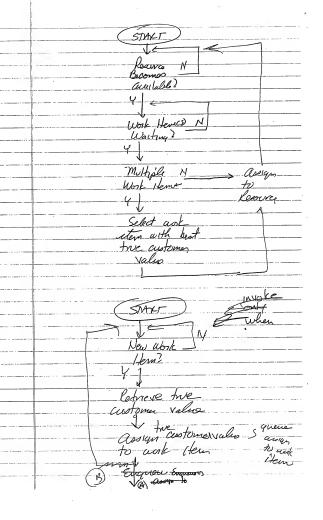
DWS: Okay, so what we're talking about is using the agent ..?.. for protective agent assignments.

J:\4366\-145\Inventor's Interview.wpd

Could by hangewood rare we done or not includes Updak Customer Multiple Work Select Work Dan

Sumo H/W as -145 START with new New Work N Hem? Qualify Contact based on the customer value / # contacts. Karquage, Channe Inodia 15 this a new De tramme P agents Available? apply special Freatment appropriate again Select Most Agoropilak or please to park call set priming agent

4366-145 hu house Media Secuer COMM Duta Network TYK self-sento STAR1 Contact d productids, Completed? Sewicing Rasonic weighting Duration Calculate true cost value Update austomer Contact ?



quality cortact
based in the customer house!
value, First of contacting, media
language, et. Enquere Park Select mest Select approp Queue 07 purking place

Flow chart START 1 pallores Inc (u das Refreeze Historical and Frend Poly Data for Agent Select arteria to perform trend/patkern analysis Analyze for Update From Agent Data Template

Collect
Metrics

Identify
Datherns

Feed into
work fine management
application

Agent Schooling